It's déjà vu all over again
How to be ready when the cheap capital environment ends
1. Déjà vu

A modern-day Rip Van Winkle arising from a few years of slumber would hardly be able to tell from the current capital markets environment that the world just experienced a historic financial crisis. **Current market conditions are, in many ways, reminiscent of the benign market conditions of 2007.** Volatility and cost of debt are low, highly-levered buyout deals have returned and the credit market penalty for being more levered is once again minuscule.1 At the same time, however, the aftermath of the financial crisis has left consumers and governments weaker and on a slow path to recovery.

While we do not know if this disparity between corporations, consumers and governments is a precursor to another asset bubble, or even another crisis, we recommend that decision-makers prepare for this possibility. By understanding the differences between 2007 and spring 2011, and by taking advantage of today's relatively benign capital markets conditions, firms can proactively manage these risks. Key executive takeaways are:

1) Today’s capital markets are reminiscent of the spring 2007 capital markets
2) Corporate balance sheets are stronger than they were pre-crisis
3) The U.S. consumer and OECD governments have little monetary and political flexibility left to manage a new crisis
4) In light of the uncertain existing economic and political environment, the cost of financial insurance and liquidity seems low. This has implications for capital allocation, M&A, financing, risk management and shareholder distributions decisions

2. The 7/11 Quiz

To understand the similarities between the capital markets environments of spring 2007 and 2011, we suggest reviewing the 7/11 Quiz in Figure 1 below. The middle column highlights the state of some key financial metrics at the peak of the crisis in early 2009. The first and third columns show metrics for the springs of 2007 and 2011, but we have mixed them up. **Which ones represent 2007 and 2011?**

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| Capital markets have improved to the point where many indicators are indistinguishable from pre-crisis time |
|---|---|---|---|
| **2007 or 2011?** | **2009** | **2007 or 2011?** |
| VIX Volatility Index | 14.0% | 45.1% | 16.0% |
| High-Yield Index1 | 6.8% | 17.6% | 7.4% |
| A to BBB-spread | 93 bps | 226 bps | 71 bps |
| T-1 to T-2 CP Spread | 12 bps | 130 bps | 21 bps |
| LBO Leverage | 6–8x | – | 6–8x |
| Inflation Rate | 2.7% | -0.1% | 2.6% |
| Brazil CDS | 72 bps | 355 bps | 107 bps |

Source: Bloomberg, FactSet
Note: Data is from the average of month-end data in March, April and May 2007; January, February and March 2009; and March, April and May 2011.

1 J.P. Morgan High Yield 100 Index.

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1 For historical cost of capital and volatility data, see appendix.
Volatility—14% in 2007 vs. 16% in 2011: The events of the past few months in the Middle East, Japan and Europe have once again highlighted how rapidly financial markets can move from calm to fear or even panic. The VIX Volatility Index, a commonly-used metric to measure equity market uncertainty, is the implied volatility of options on the S&P 500 Index. This index tends to jump when economic uncertainty roils equity investors. Despite the tumultuous events we have experienced over the past few months, the spring 2011 VIX was still below the long-term historic averages and close to where it was in 2007.

Cost of high-yield debt—7.4% in 2007 vs. 6.8% in 2011: The low cost of high-yield debt capital in the spring of 2011 has been one of the strongest indicators of how benign capital markets have been. The cost of issuing high-yield debt this spring has not only been much lower than the 17+% in early 2009, but it actually reached all-time historic lows.

Cost difference between strong and weak investment grade—71 bps in 2007 vs. 93 bps in 2011: In tumultuous credit markets, investors tend to strongly differentiate between strong and weak credits. In a benign market environment, while borrowers with weaker credit qualities still pay up relative to borrowers with stronger credits, the difference in cost is less pronounced. At 93 bps, the spread between BBB- and A rated borrowers is quite close to where it was in the spring of 2007.

Cost difference between Tier 1 and Tier 2 Commercial Paper (CP) borrowers—12 bps in 2007 vs. 21 bps in 2011: At the peak of the crisis, investors shied away from CP issued by borrowers that did not have the best credit (Tier 1). At that time, Tier 2 borrowers paid 130 bps more than Tier 1 borrowers. Today, Tier 2 borrowers pay about 21 bps more than Tier 1 borrowers, a level that is much closer to 2007 and historical norms.

Leverage level of LBOs—6 to 8x in 2007 and 2011: Another sign of the vibrancy of credit markets is that private equity firms are, once again, able to consider financing leveraged buyouts with 6 to 8x leverage (i.e. leverage levels where the quantum of debt is 6 to 8 times EBITDA). Though leverage levels are similar to what they were in 2007, today's transaction sizes are considerably smaller than the mega-deals that could successfully be executed prior to the financial crisis.

Inflation—2.6% in 2007 vs. 2.7% in 2011: Averaging 2.7% over the last few months, today's inflation rate is very similar to what it was prior to the crisis in the spring of 2007.

Brazil CDS levels—72 bps in 2007 vs. 107 bps in 2011: When markets are uncertain, investors traditionally become more concerned about the incremental risk of investing in emerging markets. For example, at the peak of the crisis, the Brazil CDS levels jumped to over 350 bps. They have since dropped to about 107 bps, close to where they were in 2007 before the crisis.

In summary, the capital markets environment this spring was in many ways indiscernible from before the 2007–2009 crisis. A variety of technical and fundamental factors are driving this performance: pension funds have broadly reallocated capital from equities to fixed income, the low interest rate environment has driven demand for yield across asset classes and fast-growing emerging economies have brought new capital into developed economies from both sovereign and individual investors. Despite the frothy capital markets, the economic environment today remains drastically different from before the crisis—a fact that senior decision-makers should consider when developing their financial policies.
3. It's Different Now

As we showed in Figure 1, many capital markets parameters are close to where they were in the spring of 2007. In fact, some parameters, such as the cost of corporate debt financing, are even lower than they were in the spring of 2007, a period renowned for its “liquidity glut.” How different is the strength of the major economic actors in our economy, i.e. large corporations, consumers and the government, today relative to 2007? More importantly, how prepared are these groups to sustain another crisis?

Figure 2

<table>
<thead>
<tr>
<th>Large firms supporting the economy as other major actors remain weak</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Consumers</strong></td>
</tr>
<tr>
<td>1) Wealth down 10%</td>
</tr>
<tr>
<td>2) High unemployment</td>
</tr>
<tr>
<td>3) Less confidence</td>
</tr>
<tr>
<td><strong>Governments</strong></td>
</tr>
<tr>
<td>1) Ballooning debt</td>
</tr>
<tr>
<td>2) Deficits meaningfully higher</td>
</tr>
<tr>
<td>3) Ratings under pressure</td>
</tr>
</tbody>
</table>

Large firms

**Economic & capital market environment**

**Large Firms**

1) More cash
2) Improved interest coverage
3) Extended maturities

Source: J.P. Morgan

Large U.S. and European Corporations

With pressure on revenues, profitability and credit markets, global recessions do not typically improve a firm’s financial position. Ironically, however, as a result of the recent crisis, large non-finance companies took significant measures to strengthen their balance sheets beyond historic norms. These measures included cutting costs, acquisitions and shareholder distributions, while raising liquidity and extending maturities. This focus on fortress balance sheets has resulted in historic high on-balance-sheet cash levels and low leverage, in particular for U.S. firms. What are the key takeaways of these strong corporate balance sheets?

1) Should a double-dip recession emerge, large cap firms will, on average, be even better prepared to weather the storm than they were prior to the recent crisis
2) Large firms will experience significant pressure from investors and activists to use their balance sheet flexibility to be more aggressive from an acquisition, investment and shareholder distribution perspective
3) With limited large financing needs, credit investors will continue to crave opportunities to finance the most creditworthy firms putting downward pressure on financing costs
Corporate Finance Advisory

Figure 3

Large U.S. corporations—cash rich and less short-term debt

U.S. corporate balance sheets are strong

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt/EBITDA</td>
<td>2.1x</td>
<td>2.1x</td>
</tr>
<tr>
<td>Interest Coverage Ratio</td>
<td>9.5x</td>
<td>10.5x</td>
</tr>
<tr>
<td>Cash/Total Assets</td>
<td>8.2%</td>
<td>10.8%</td>
</tr>
<tr>
<td>Short-term Debt/Total Debt</td>
<td>22.9%</td>
<td>16.8%</td>
</tr>
</tbody>
</table>

Source: FactSet; Bloomberg; J.P. Morgan
Note: Figures calculated using 2007 S&P 500 constituents rolled forward based on aggregate data.

Figure 4

Large European firms—cash rich and less short-term debt

Equally strong European corporate balance sheets

<table>
<thead>
<tr>
<th>FTSE 100 EURO (ex. Financials)</th>
<th>2007</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt/EBITDA</td>
<td>1.8x</td>
<td>2.1x</td>
</tr>
<tr>
<td>Coverage Ratio</td>
<td>11.0x</td>
<td>10.4x</td>
</tr>
<tr>
<td>Cash/Total Assets</td>
<td>7.1%</td>
<td>8.2%</td>
</tr>
<tr>
<td>Short-term Debt/Total Debt</td>
<td>30.6%</td>
<td>25.0%</td>
</tr>
</tbody>
</table>

Source: Bloomberg; J.P. Morgan
Note: Figures calculated using 2007 FTSE 100 EURO constituents rolled forward based on aggregate data.

The Consumer

The consumer is a main actor in any economic recovery. A strong and confident consumer leads to stronger corporate and government sectors. According to some estimates, about 70% of the U.S. economy is consumer driven.² Compared to corporations, however, the recovery of the consumer has lagged and remains fragile.

1) Unemployment rates remain elevated and labor participation rates have dipped. This trend suggests that the headline unemployment rate significantly understates the true level of unemployment, as many people have simply stopped looking for jobs and dropped out of the calculation.

2) New lows in home price indices not only contribute to lower household net worth, but also limit employee mobility because of the large percentage of underwater mortgages. This, in turn, drives higher unemployment rates and also limits access to personal credit and consumption.

Figure 5

The U.S. Consumer—poorer than in 2007 and still healing from the crisis

Consumers still reeling from the crisis due largely to weakness in the housing and labor markets

<table>
<thead>
<tr>
<th>Consumer Balance Sheets</th>
<th>2007</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unemployment</td>
<td>4.5%</td>
<td>9.1%</td>
</tr>
<tr>
<td>Mortgages Underwater¹</td>
<td>6.9%</td>
<td>22.7%</td>
</tr>
<tr>
<td>Consumer Confidence Index²</td>
<td>108.5</td>
<td>60.8</td>
</tr>
<tr>
<td>Household Net Worth</td>
<td>$64.2 trn</td>
<td>$58.1 trn</td>
</tr>
</tbody>
</table>

Source: FactSet; Bloomberg; CoreLogic; Federal Reserve; J.P. Morgan
¹ Includes prime and subprime mortgages, securitized and non-securitized loans, fixed and adjustable loans and agency and non-agency debt.
² Conference Board Consumer Confidence Index.

² Based on the Bureau of Economic Analysis’ estimate of U.S. personal consumption expenditures.
OECD Governments

The financial position of sovereign entities has deteriorated significantly since the crisis began in 2007. For example, the U.S. debt to GDP ratio has exploded from 62% to 100%. Furthermore, with a current deficit to GDP of 10.8% in the U.S., the debt to GDP ratio is projected to continue to balloon. This trend is equally evident in several large EU economies, all of which are currently experiencing significantly higher debt loads and more significant budget deficits than in 2007.

1) Should another crisis occur in the near term, sovereign entities in OECD countries have limited capacity or desire to be as proactive as they were during the recent crisis

2) Sovereign entities will continue to be pressured to reduce their involvement in the economy with a potential "near-term" negative impact on economic growth, specifically for industries that depend on government spending

3) Sovereign entities will continue to seek sources to increase tax revenue which could be focused on industries that have outperformed

4) Because some of the sovereigns, especially the U.S., are very short-term financed, rising rates would lead to a significant increase in financing costs

5) While the U.S. government has oversized debt obligations, its cost of debt (i.e. Treasury yields) is significantly lower than in 2007

Figure 6

OECD Governments—little flexibility left...

...sparking debate over credit worthiness

<table>
<thead>
<tr>
<th>U.S. Balance Sheet</th>
<th>2007</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt/GDP</td>
<td>62.2%</td>
<td>99.5%</td>
</tr>
<tr>
<td>Deficit/GDP</td>
<td>2.7%</td>
<td>10.8%</td>
</tr>
<tr>
<td>S&amp;P Credit Rating</td>
<td>AAA/Stable</td>
<td>AAA/Neg</td>
</tr>
<tr>
<td>Federal Employees/Total</td>
<td>19.9%</td>
<td>21.9%</td>
</tr>
</tbody>
</table>

Source: FactSet; Bloomberg; International Monetary Fund; Bureau of Labor Statistics; J.P. Morgan
Note: 2011 debt/GDP and deficit/GDP figures represent IMF projections as of April 2011.

<table>
<thead>
<tr>
<th>EU Balance Sheet</th>
<th>Debt/GDP</th>
<th>Deficit/GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
<td>43.9%</td>
<td>83.0%</td>
</tr>
<tr>
<td>France</td>
<td>63.8%</td>
<td>87.6%</td>
</tr>
<tr>
<td>Germany</td>
<td>64.9%</td>
<td>80.1%</td>
</tr>
<tr>
<td>Spain</td>
<td>36.1%</td>
<td>63.9%</td>
</tr>
</tbody>
</table>

Source: International Monetary Fund; J.P. Morgan
Note: 2011 figures represent IMF projections as of April 2011.
4. Lessons for when the music stops

With consumers and governments likely to remain weakened by the crisis for years to come, how should senior decision-makers consider today’s very benign capital markets? The range of forecasts, as well as the last five-year experience for the 10-year Treasury, the USD/EUR exchange rate, oil prices and the S&P 500 level, are summarized in Figure 7. Together, these ranges suggest that we should continue to consider a wide array of possible economic and capital markets outcomes when making financial decisions. Our recommendations are:

**Capital allocation**
- Take advantage of current capital markets opportunities to lock in a low cost of capital for major projects
- Consider today’s low cost of capital when allocating capital, but take into account the likelihood that long-term cost of capital is likely to be higher than today’s, particularly if funding needs are ongoing
- Evaluate new projects in the context of more pronounced cyclicality and new emerging risks

**Mergers and acquisitions**
- Take advantage of current capital markets conditions to build a platform that will allow for strong returns through cycles
- With stronger balance sheets, firms may be more proactive from an M&A perspective than they were before the crisis. Prepare a defense strategy that will allow for unexpected overtures from acquirers and activist shareholders alike
- M&A transactions have a long lead time. Develop an M&A strategy early, including the preservation of financial flexibility, to make sure opportunities can be seized on short notice during the next major downturn

**Financing**
- Do not postpone major financing needs for projects, M&A or shareholder distributions
- Continue to consider the entire financing toolbox, including debt, convertibles, hybrids, equity and the bank market, when making financing decisions
- Do not add leverage just because debt is cheap; opportunistically take advantage of today’s conditions to extend maturities and achieve the optimal leverage levels

**Shareholder distributions**
- Adopt dividend policies that are sustainable through cycles and assess liquidity based on realistic downside scenarios while returning excess capital to shareholders
- A transparent capital return policy may attract another set of investors and achieve a better valuation (particularly in a down cycle)
- Continue to prioritize strategic opportunities over distributions

**Risk management**
- Plan for the future, taking into account a wide variety of outcomes
- In the context of the perceived economic and political uncertainty, buying insurance either through options or by raising liquidity seems inexpensive
- Take into account the interaction of risk management with capital allocation, leverage and liquidity decisions
Figure 7

Analyst expectations are varied over the next year

Long-term rates (10-yr U.S. Treasury yield)

Exchange rates ($USD/EUR)

Oil prices ($ per bbl)

Equity prices (S&P 500)

Source: Bloomberg; figures as of 5/31/11. Estimates all as of Q2 2012

1 Figures implied by one standard deviation moves of the S&P 500 based on current option-implied volatility of 15%.
5. Appendix

Figure 8
Cost of debt near historic lows and cost of capital curve nearly as flat as in 2007

Historically low Treasury yield driving low cost of debt

![Yield graph]

Source: Bloomberg. Data through May 2011

Difference in BBB vs. BB WACC over time

![WACC graph]

Source: J.P. Morgan, Bloomberg. Note: Calculations performed using average 10-yr U.S. Treasury rates, cost of debt and market risk premiums (based on J.P. Morgan estimates) for BBB and BB industrial firms. Assumed current BBB beta of 1.0 and relevered beta of 1.5 for BB WACC. Implied debt/cap ratios for BBB and BB ratings based on rating agency guidance. Marginal tax rate of 35% adjusted for Moody’s default rates. 2011 figures reflect year-to-date averages as of 5/31/11.

Figure 9
Volatility has returned to pre-crisis levels despite recent geopolitical turmoil

![VIX graph]

Source: Bloomberg based on weekly observations as of 5/31/11
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